RHODE ISLAND STATEWIDE PLANNING PROGRAM
LAND USE 2025: STATE LAND USE POLICIES AND PLAN -- UPDATE

draft 11/19/2004

Land Use Plan Intensity Assignment / Scenario Development Methodology

Step 1: Translate land suitability analysis into potential development intensities		
Step 1A: Use constraints and infrastructure to assign potential intensity class		
Purpose: ***Assign land with different constraint layers to five development/conservation intensity classes***	*Process:* **Integrate water and sewer coverage with resource constraint/value coverage in manner that allows areas to be assigned a value based upon its attributes of resource value/constraint layers, and infrastructure available. SEE TABLE 1 -- PAGE 2.**	*Result:* ***All land preliminarily classified for development intensity***
Step 1B: Second iteration -- prioritize based on infrastructure to constrain assignment to best suited areas		
Purpose: ***Prioritize land assignments within the A, B & C development/conservation intensity classes based on infrastructure availability and proximity.***	*Process:* **Prioritize areas classified as A, B, or C intensity which currently have public water and sewer service OR are within 1000 ft of the current extent of such services, AND are within 1 mile of a major highway (minor arterial or higher functional class).**	*Result:* ***Primary and secondary development areas***
Step 2: Develop templates for scenarios by sketch mapping development areas		
Purpose: ***Delineate development emphasis areas for various future land use scenarios***	*Process:* **Develop "Sketch maps" of areas to be the focus for new development under different plan scenarios. Construct GIS-based templates based on the sketch maps and Traffic Analysis Zone geography. Possible Scenarios: extension of current trends, infill and accretion of growth at the urban fringe; growth centers and corridors; and a composite scenario.**	*Result:* ***Development Scenario Templates***
Step 3: Delineate conservation priority areas template for use in all scenarios		
Purpose: ***Delineate geographic areas to be the focus for conservation under future land use scenarios***	*Process:* **Delineate primary and secondary areas for conservation to be assigned under the scenarios.**	*Result:* ***Primary and secondary conservation areas***
Step 4: Determine quantities of new developed land by intensity class to be accommodated under each scenari		
Purpose: ***Calculate the areas of different intensity land to be accomodated under the various scenarios of future land use***	*Process:* **Calculate acreages of different land use intensities for assignment within the geographic templates of the scenarios, *based upon differing assumptions for each scenario.* SEE TABLE 2 -- PAGE 3**	*Result:* ***Acreages (by analysis zone) of new growth under each scenario***
Step 5: Assignment of land to development intensity and conservation classes under different scenarios		
Purpose: ***Designate geographic areas to be developed for various intensities or conserved under the future land use scenarios***	*Process:* **For each scenario: Combine existing developed and existing protected land, conservation areas (output of step 3), and scenario template (from step 2). Assign land needed to reach growth target acreages as established in step 4. Assign land based on density and intensity assumptions. Assign all priority development land first, then non-priority land, until needs are met. Adjust where needed to balance available land with forecast needs.**	*Result:* ***Alternative geographic delineations of 2025 land use***
Step 6: Analyze Transportation Effects of Scenarios		
Purpose: ***Assess transportation effects of various land use scenarios***	*Process:* **Load population and employment distribution from scenarios into highway system model (TransCad). Assess transportation system effects of scenarios.**	*Result:* ***Assessment of transportation system impacts of scenarios***
Step 7: Select Future Land Use Plan		
Purpose: ***Select Future Land Use Plan***	*Process:* **Assess, with Technical Committee, conformance of scenarios with goals and objectives, impact on highway network, and differences with composite municipal future land use plans. Select one scenario as Land Use 2025 Plan.**	*Result:* ***State Land Use Plan 2025***
Step 8: Comparison of Future Plan to Composite of Municipal Future Land Use Map		
Purpose: ***Determine significant differences and adjust 2025 plan scenario where warranted.***	*Process:* **Contrast selected 2025 Future Land Use Plan with the composite municipal future land use plan. Adjust 2025 Plan where deemed prudent, and/or identify areas to be reviewed during next Comprehensive Plan update cycle.**	*Result:* ***Reconciliation of plans, and/or identification of differences with Local Plans***

Note: Revisions made subsequent to Technical Committee review on 12-3-04 are shown in

TABLE 1

Decision Rule Matrix for Initial Assignment of Land to Development Intensity Categories

# Constraints	Sen. Water Res.Area[1]	Public Infrastructure Avail. water	sewer	Initial Assign DEV/CON:
0	N	N	N	A
0	N	N	Y	A
0	N	Y	N	A
0	N	Y	Y	A
0	Y	N	N	D
0	Y	Y	N	C
0	Y	N	Y	C
0	Y	Y	Y	B
1	N	N	N	B
1	N	Y	N	B
1	N	N	Y	A
1	N	Y	Y	A
1	Y	N	N	D
1	Y	Y	N	C
1	Y	N	Y	C
1	Y	Y	Y	B
2	N	N	N	C
2	N	N	Y	A
2	N	Y	N	B
2	N	Y	Y	A
2	Y	N	N	E
2	Y	N	Y	C
2	Y	Y	N	D
2	Y	Y	Y	B
3	N	N	N	D
3	N	N	Y	A
3	N	Y	N	B
3	N	Y	Y	B
3	Y	N	N	E
3	Y	N	Y	D
3	Y	Y	N	D
3	Y	Y	Y	C
4 +	any	any	any	E
Any	exclude currently protected lands from assignment of development code			P

* Assignment adjusted to reflect recommendations of Scituate Reservoir Management Plan and CRMC SAM Plans

KEY: DEV/CON Levels

Level:	*Description -- Optimum potential for ...*
A	*Higher intensity development (4+ du/ac. w/ Commercial, Industrial, Mixed Use (CIM))*
B	*Moderate intensity development (1-4 du/ac. & CIM)*
C	*Low intensity development (0.25- 0.9 du/ac, limited** CIM) and conservation*
D	*Conservation & limited, resource-based development (<0.25 du/ac, limited** CIM)*
E	*Conservation / very limited development potential*

*** CIM type and intensity per recommendations of Scituate Watershed Mgmt. Plan*

Note: residential ranges given reflect gross densities

Assignment Assumptions:

*Areas with public water & sewer (or sewer alone) assigned to A, if not a Sensitive Water Res. Area**
*Area with public water (alone) assigned to (at least) B, unless in Sensitive Water Resource Area**
Sensitive water resource areas dropped at least one level -- all other things equal
Sensitive water resource areas with public water or sewer assigned to C
Sensitive water resource areas without public water or sewer assigned to D or E

[1] ***Sensitive water resource areas include:***

--GAA classified groundwater areas
--Public surface supply reservoir watersheds
--Coastal pond watersheds covered by CRMC Salt Pond Region and Narrow River SAM Plans

Note: Revisions made based upon Technical Committee inut on 12-3-04 are shown in red

TABLE 2: POTENTIAL SCENARIOS

Scenario 1: Trend

ASSUMPTIONS: Growth absorbed in **new areas throughout state** adjoining existing development **at continuation of current (1995) densities.** Distribution of future growth to be in accord with trends, RISPP projections, and reflect community future land use plans.

EFFICIENCY: No change -- Future land use intensity within each zone to reflect existing (1995) intensity patterns.

DISTRIBUTION: No major change in concentrations.

Scenario 2: Centers/Corridors

ASSUMPTIONS: Future growth to be in accord with RISPP projections overall, but **growth within centers and corridors to be emphasized.** Direct majority of new growth through 2025 to *priority land within centers and corridors*. Achieve higher densities and greater concentration than trend to reduce overall land "needed" for new growth.

EFFICIENCY: Future growth assumed to be ~~*10%*~~ *20% more land efficient overall* than trend. (i.e. compared to trend, only ~~90~~ 80% land required to accommodate forecasted growth).

DISTRIBUTION: Zones within *centers & corridors template to receive* ~~*75%*~~ **80%** of future growth**.**

Scenario 3: Infill

ASSUMPTIONS: Future growth to be in accord with RISPP projections overall, but **growth within currently urbanized areas to be emphasized.** Direct majority of new growth through 2025 to *priority and other suitable land within the 2000* ~~*FHWA*~~ ***Census*** *urban boundary, with emphasis on infill within the 1990* ***Census*** *urban boundary.* Achieve higher densities and greater concentration than trend to *reduce overall land "needed"* for new growth**.**

EFFICIENCY: Future growth assumed to be ~~*15%*~~ **30%** *more land efficient overall* than trend. (i.e. compared to trend, only ~~85%~~ **70%** land required to accommodate forecasted growth).

DISTRIBUTION: Zones within *2000* ***Census*** *urban boundary template to receive* ~~*75*~~ **85***%* of future growth. Zones within the *1990* ***Census*** *urban boundary to receive* ~~*35*~~ **45***%* of new growth.

Scenario 4: Composite

ASSUMPTIONS: Future growth to be in accord with RISPP projections overall, but **growth within currently urbanized areas and centers and corridors** to be emphasized over other areas. Direct majority of new growth through 2025 to *priority and other suitable land within centers and corridors and within the* ~~*FHWA*~~ **Census** *urban boundary, with emphasis on infill within the 1990* ***Census*** *urban boundary.* Achieve higher densities and greater concentration than trend to *reduce overall land "needed"* for new growth.

EFFICIENCY: Future growth assumed to be ~~*20*~~ **35***% more land efficient overall* than trend. (i.e. compared to trend, only ~~80~~ **65**% land required to accommodate forecasted growth).

DISTRIBUTION: Zones within *composite template to receive* ~~*75*~~ ***90*** *%* of future growth. Zones within the *1990* **Census** *urban boundary to receive* ~~*40*~~ **50***%* of new growth.